

AX-Ni 2,5 (TIG)

AX-Ni 25 (GMAW)

Standards

EN ISO 636-A:	W 46 6 W2Ni2	TIG rod
EN ISO 636-B:	W 55A 6 WN5	
EN ISO 14341-A:	G 46 6 M21 2Ni2	Solid wire
EN ISO 14341-B:	G 55A 6 M21 SN5	
AWS A5.28:	ER80S-Ni2	

Properties

Nickel alloyed TIG-rod/solid wire for gas shielded arc welding of cryogenic fine-grained structural steels down to an operating temperature of -60°C.

Important base materials / Important applications

Cryogenic special structural steels such as 10Ni14, 12Ni14, 13MnNi6-3, 15NiMn6, P275NL1-P460NL1, P275NL2-P460NL2, S255NL-S460NL

ASTM A 203 Gr. D, E; A 333 Gr. 3; A334 Gr. 3; A 350 Gr. LF1, LF2, LF3; A 420 Gr. WPL3, WPL6; A 516 Gr. 60, 65; A 529 Gr. 50; A 572 Gr. 42, 65; A 633 Gr. A, D, E; A 662 Gr. A, B, C; A 707 Gr. L1, L2, L3; A 738 Gr. A; A 841 Gr. A, B, C.

Typical composition of welding rod / solid wire in %

C	Si	Mn	Ni
0,08	0,5	1,1	2,4

Mechanical properties of all-weld metal (typical values)

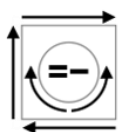
Yield strength $R_{p0,2}$ [MPa]	500
Tensile strength R_m [MPa]	620
Elongation A ($L_0 = 5d_0$) [%]	27
Impact work KV [J]	70 at -60°C

Shielding gas: 100% Argon, PWHT: untreated

Operating data

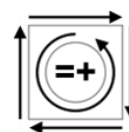
TIG:

Shielding gas: I1 (100%Argon)
acc. to ISO 14175



GMAW:

M2 and M3



Approvals

GMAW: TÜV (12919.), TIG: -

Packaging and available size

Spools	Ø mm	0,8	1,0	1,2	1,6		
Rods	Ø mm x 1000mm	1,6	2,0	2,4	3,0		

Other dimensions on request.